

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A wireless communication apparatus comprising:
a multipath detection part which detects a state of multipath in said wireless communication apparatus; and

a send part which sends multipath detection information detected by said multipath detection part to another a wireless communication apparatus ~~at the other end~~ via a wireless network;

wherein said another wireless communication apparatus generates a signal inverted from an interference wave signal generated by using said multipath detection information and sends the inverted signal and a send signal to said wireless communication apparatus via the wireless network, and said wireless communication apparatus receives the inverted signal and the send signal so that an interference is canceled by the inverted signal.

Claims 2-3 (Canceled).

Claim 4 (Currently Amended): ~~The~~ A wireless communication apparatus ~~as claimed in claim 3, comprising:~~

a multipath component canceling signal generation part which generates a signal which cancels a multipath component in another wireless communication apparatus on the basis of multipath detection information representing a state of multipath sent from said another wireless communication apparatus via a wireless network; and

a send part which sends said signal which cancels said multipath component generated in said multipath component canceling signal generation part to said another wireless communication apparatus, wherein

said multipath component canceling signal generation part includes
a multipath component generation part which generates a multipath
component on the basis of said multipath detection information representing said state of
multipath in said another wireless communication apparatus, and
an interference wave detection part which detects an interference wave
occurring between said multipath component and a send wave,

said interference wave detection part includes
a filter part which filters a synthesized wave of said multipath component and
said send wave, and
an interference wave signal generation part which generates an interference
wave signal corresponding to that in said wireless communication apparatus at the other end
by comparing output signal from said filter part and said send wave.

Claim 5 (Original): The wireless communication apparatus as claimed in claim 4,
further comprising:

an opposite phase part which changes a phase of said interference wave signal to an
opposite phase of said phase; and

a send part which sends said interference wave signal having said opposite phase to
said wireless communication apparatus at the other end.

Claim 6 (Currently Amended): The wireless communication apparatus as claimed in
claim 2 5, wherein said wireless communication apparatus sends an opposite phase wave of
said signal which cancels said multipath component at a time position of a multipath having
no interference in order to cancel said signal which cancels said multipath component.

Claim 7 (Canceled).

Claim 8 (Currently Amended): ~~[[The]]~~ A wireless communication method ~~as claimed in claim 7,~~ comprising the step of:

sending from a wireless communication apparatus a signal which cancels a multipath component in another wireless communication apparatus to said another wireless communication apparatus with a send signal via a wireless network,

wherein said signal which cancels said multipath component is a signal inverted from an interference wave signal generated by using multipath detection information sent from said another wireless communication apparatus via the wireless network ~~from said multipath component in said wireless communication apparatus at the other end.~~

Claim 9 (Currently Amended): A wireless communication method comprising the steps of:

a first wireless communication apparatus detecting a state of multipath in said first wireless communication apparatus;

said first wireless communication apparatus sending multipath detection information on said state to a second wireless communication apparatus via a wireless network;

said second wireless communication apparatus receiving said multipath detection information;

said second wireless communication apparatus generating a signal for canceling a multipath component in said first wireless communication apparatus on the basis of said multipath detection information; and

said second wireless communication apparatus sending said signal for canceling said multipath component to said first wireless communication apparatus via the wireless network,

wherein said signal for canceling said multipath component is a signal inverted from an interference wave signal generated by using multipath detection information sent from said first wireless communication apparatus via the wireless network.

Claim 10 (New): A wireless communication apparatus comprising:

a multipath component canceling signal generation part which generates a signal which cancels a multipath component in another wireless communication apparatus on the basis of multipath detection information representing a state of multipath sent from said another wireless communication apparatus via a wireless network; and

a send part which sends said signal which cancels said multipath component generated in said multipath component canceling signal generation part to said another wireless communication apparatus via the wireless network,

wherein said signal which cancels said multipath component is a signal inverted from an interference wave signal generated by using multipath detection information sent from said another wireless communication apparatus via the wireless network.

Claim 11 (New): The wireless communication apparatus as claimed in claim 10, wherein said wireless communication apparatus sends an opposite phase wave of said signal which cancels said multipath component at a time position of a multipath having no interference in order to cancel said signal which cancels said multipath component.